NEW SCALE
T E C H N O L O G I E S
Ingeniously Small Motion Systems

Developer's Kits for
SQUIGGLE® Micro Motors and
TRACKER™ Position Sensors (NSD-5310)

in partnership with

 austriamicrosystems

FEATURES

- Easy push-button demonstration of motion
- PC interface and development software for detailed evaluation and system development
- Mechanical and electrical reference design for system integration
- Components removable for system integration and prototype testing in your design

INCLUDED COMPONENTS

- **SQL-1.8-6-12-SS** SQUIGGLE motor
- **NSE-5310** TRACKER position sensor
- **MC-3300** motor controller with integrated **NSD-1202** motor drive ASIC
- New Scale Pathway™ Software
- Connector cables and user guides

Easy evaluation of the world's smallest linear motor and position encoder

New Scale developer's kits allow fast evaluation of SQUIGGLE micro motors and TRACKER position sensors. These kits demonstrate the performance of these tiny components – the smallest of their kind. They also serve as mechanical and electrical reference designs for integration into your system.

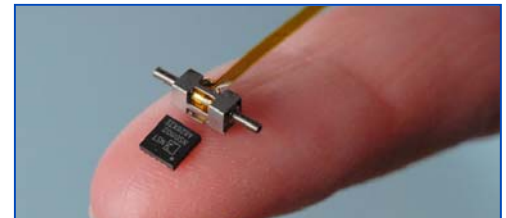## Closed-loop SQUIGGLE motor / TRACKER sensor kit

- **SQL-1.8-6-12-SS SQUIGGLE® motor.** The world's smallest linear motor at 2.8 x 2.8 x 6 mm features 6 mm travel, 30 gram force stall force and 0.5 µm resolution.

- **NSE-5310 TRACKER™ position sensor.** Magnetic sensor array with on-chip digital encoding has 0.5 µm resolution. As small as 3.9 x 2.5 mm chip-on-board. (Kit has TSSOP version).

- **MC-3300 motor controller.** A development platform and reference design integrating the NSD-1202 motor driver ASIC. The controller generates high frequency signals to drive the SQUIGGLE motor and accepts feedback from the TRACKER or other position sensor. It connects to a PC via USB.

- **New Scale Pathway™ Software.** New Scale's user interface and ActiveX command library make it simple to operate and evaluate the motor and sensor. You can build custom scripts using the intuitive scripting interface. These scripts and ActiveX commands can be used later in your embedded system design.

- **Mechanical reference design.** The SQUIGGLE motor and NSD-5310 TRACKER sensor are integrated into a slide assembly demonstrating proper mounting, loading and alignment.
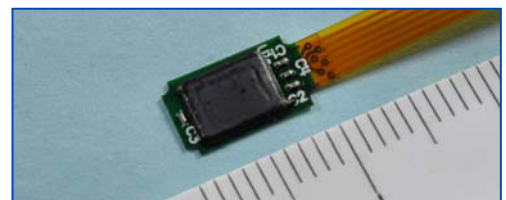
Open-loop SQUIGGLE motor kit

Open-loop kits include the motor, controller, software and reference design as described above (no position sensor). Use these kits to test open-loop motor performance or add your own position sensors.

Developer's kits enable easy performance demonstration and system development with SQUIGGLE motors and TRACKER position sensors.
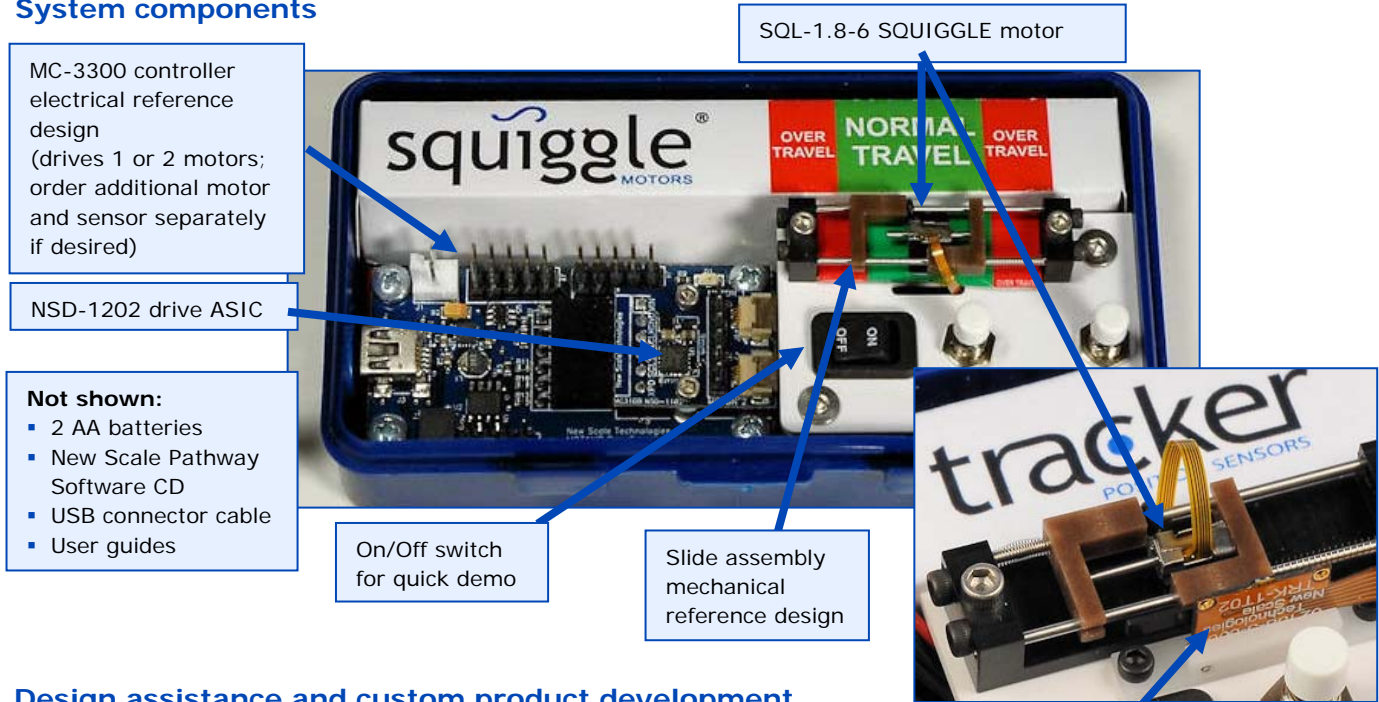

SQUIGGLE motor and driver — all kits integrate an SQL-1.8 SQUIGGLE motor and NSD-1202 drive ASIC into a mechanical and electrical reference design.

TRACKER position sensor — closed-loop kits include an NSD-5310 TRACKER position sensor to evaluate the TRACKER and/or closed-loop SQUIGGLE motor performance. *(Chip on board shown; developer's kits have TSSOP20 on board.)*

New Scale Technologies, Inc. ~ www.newscaletech.com ~ Phone (585) 924-4450

System components

MC-3300 controller electrical reference design
(drives 1 or 2 motors; order additional motor and sensor separately if desired)

NSD-1202 drive ASIC

Not shown:
- 2 AA batteries
- New Scale Pathway Software CD
- USB connector cable
- User guides

SQL-1.8-6 SQUIGGLE motor

On/Off switch for quick demo

Slide assembly mechanical reference design

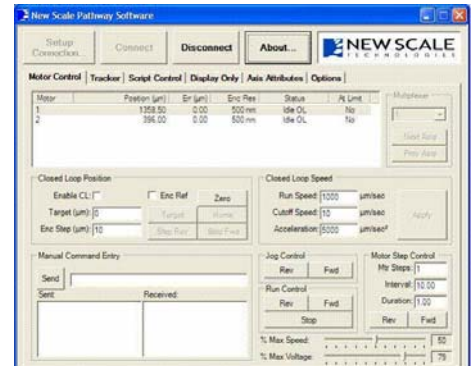NSE-5310 TRACKER position sensor (closed-loop kits only)

Design assistance and custom product development

Contact New Scale if you need assistance with a developer's kit or have questions about integrating SQUIGGLE motors or TRACKER position sensors into your application. We are pleased to review your OEM designs to ensure your success. Contact us regarding volume pricing, customized micro motors, and custom chip-scale packaging for position sensors. We also work with OEMs to design application-specific modules to fit your requirements.

New Scale Pathway™ Software is a flexible, sophisticated development tool with easy-to-use graphical user interface and intuitive scripting environment. It facilitates evaluation, system development and prototype test.

Ordering information

Model	Description
DK-1.8-SS-TRK-33	SQUIGGLE motor closed-loop / TRACKER position sensor developer's kit includes: • one SQL-1.8-6-12-SS SQUIGGLE motor mounted in reference integration slide assembly • one NSE-5310 TRACKER position sensor, adapter and 11mm magnet • one battery-operated MC-3300 motor controller (drives up to two motors and two sensors / batteries included) • USB connector cable • New Scale Pathway Software for Windows
DK-1.8-6-12-SS	SQUIGGLE motor open-loop developer's kit includes: • one SQL-1.8-6-12-SS SQUIGGLE motor mounted in a reference integration slide assembly • one battery-operated MC-3300 motor controller (drives up to two motors / batteries included) • USB connector cable • New Scale Pathway Software for Windows
PCS-3V-K	Optional AC power adapter
SQL-1.8-6-12-SS	Additional motor for use with either developer's kit
TRK-1T02	Additional NSE-5310 sensor for use w/ DK-1.8-SS-TRK-33 kit
Magnet 2mmx11mm	Additional magnet for TRACKER NSE-5310 sensor

AC Power Adapter (optional)

SQL-TRK-developers-kits V3-6.18.09

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